

DOCUMENT RESUME

ED 190 031

HE 013 025

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TITLE Occupational Status Attainment of British and American Women Graduates: A Comparative Path Analysis.
SPONS AGENCY National Inst. of Mental Health (DHEW), Bethesda, Md.
PUB DATE [78]
GRANT NIMH-R03-MH30416
NOTE 17p.
EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Academic Persistence; Bachelors Degrees; *Careers; *College Graduates; Competition; *Educational Benefits; *Females; Foreign Countries; Graduate Study; Higher Education; Mothers; Socialization; *Status; Student Educational Objectives; Undergraduate Study; Vocational Adjustment; *Womens Education
IDENTIFIERS *Great Britain; United States

ABSTRACT

Using two highly comparable surveys of British and American college graduates seven years after graduation, an analysis of the cross-national predictors of occupational status attainment of the women graduates was developed to test differences in the structural and socialization effects of the two educational systems. Comparative path analyses indicated that: (1) attendance at a prestigious institution was less dependent on social origins but more predictive of occupational status in Britain than in the United States; (2) graduate school attendance was more highly associated with occupational prestige in the U.S. than Britain; and (3) mothering was less likely to take American women than British out of graduate school or a career, though it reduced the time in graduate school and the prestige of early career attainments. Results indicate that British graduate women, selected at an early age on academic criteria, are more readily able to convert their high status undergraduate education into occupational prestige. American women graduates have a less valuable undergraduate degree that is more convertible to high occupational status if it first leads to graduate schools. An ability to overcome obstacles, characteristic of the educated American mother, may well be an unintended consequence of the less supportive, more competitive, environment of the American educational system. (Author/MSE)

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Occupational Status Attainment of British and American Women Graduates:
A Comparative Path Analysis*

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* This research was conducted while I was supported by NIEH Grant#R03MH30416.

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Introduction

Comparative research on Britain and the United States has found striking similarities in the determinants of educational attainment (Kerchoff, 1974) and the association of educational attainment with occupational status (Treiman and Terrell, 1975). Kerchoff (1974) found that while ability and socioeconomic origins may be critical at different points in the school careers of British and American youth, those who finally emerge as educationally successful in each country are similar in characteristics (Kerchoff, 1974:796). Treiman and Terrell (1975) conclude that educational attainment plays a similar role in the occupational mobility of British and American men despite the great differences between the systems of education. These findings are at odds with the implications of Ralph Turner's (1960) well-known theory that the more meritocratic British system of education "sponsors" the mobility of its intellectually able regardless of social origin, whereas the more open system of American education stages a continuing "contest" throughout the schooling career.

In the Treiman and Terrell (1975) study, the subjects were drawn from a national survey of adult males of varying ages and educational attainments. As a result, the length of time between completion of formal education and the point at which occupational status was measured varied considerably. This may well have obscured important differences, between Great Britain and America, in the speed with which academic credentials could be translated into occupational status. Age cohort analyses of those with comparable educational achievement would allow an examination of such differences. Even if there were few cross-national differences in the degree to which educational attainment was predictive of occupational status, these "educational effects" could have occurred after differing periods of time during which intermediate

linkages between education and occupation could have come into play. Understanding the linkages between schooling and career attainment may be particularly important in the study of women whose marital and fertility patterns (which often follow the completion of schooling) have traditionally been obstacles to the attainment of career success.

Turner (1960) characterized British education as a "sponsored" system which selects the more academically able at an early age and sponsors them in such a way that educational attainment is less dependent upon social background or other nonacademic factors. His depiction of the American educational system as a "contest" which is less selective at an early age implies that nonacademic factors could remain relevant for a longer period of time. In addition, a contest system is less supportive of the academically able. Sponsorship can only be applied to the British system of education following the reforms of the 1944 Education Act which opened the selective secondary grammar schools to those who passed the 11+ examination. Trainor and Terrell acknowledge that their representative sample of the adult population of Great Britain in 1963 includes only a small minority whose education began after the reorganization of the British schooling system (1975:576). An age cohort analysis, if based on a sample of post-World-War II graduates, could elucidate the effects of sponsorship.

The structural characteristics of the British and American education systems, as "sponsored" and "contest" systems respectively, suggest the following hypothesis concerning the linkages between educational attainment and occupational status:

1 A. High educational attainment (e.g., graduating from college) in a sponsored educational system such as exists in Britain should be more readily translated into occupational status than equally high educational attainment

in the United States.

1 B. High educational attainment may accrue more status for a lower-class youth in a sponsored system than would be gained in a contest system, given that the selectivity for sponsorship may have a secondary, honorary effect.

1 C. Educational attainment in a contest system may require more years of schooling (e.g., graduate school degrees as compared to undergraduate degrees) to achieve an equivalent level of occupational status.

From a perspective of socialization, it would seem that the experience of being "sponsored" has effects different from those of "competing" in a contest. The talents necessary to compete successfully in a long-term contest (aggressiveness, persistence, the ability to overcome obstacles) may not be called for in a more supportive educational environment. Those who would expect to confront obstacles in the pursuit of occupational goals (e.g., women) may benefit from the strategies developed in achieving success in an educational "contest."

Differences in the socializing experiences of a competitive as compared with a sponsored educational system suggest the following hypothesis:

2 A. Those whose entry into and success within the occupational sector may be barred or restricted because of ascriptive reasons, may learn things in the course of a competitive educational experience that will be of benefit at the next stage.

Sponsored Women and Contestant Women

An educational system that "sponsors" its most able students, regardless of social origin, should be better able to retain talented women from all social classes than a non-sponsored system. If sponsorship leads more directly to occupational gains (Hypothesis 1A), this could be of particular

advantage to women, whose personal life commitments may begin to intrude on their educational and occupational options once they have reached their early twenties.

Although higher education is consistently related to increased employment for women in the United States and Great Britain, marriage and fertility alter the patterns of labor force participation (Bowen and Finegin, 1969; Parnes et al., 1975; Sweet, 1973; Waite, 1976; Klein, 1965; Fogarty, Rapoport and Rapoport, 1971). Attempts to refine the relationship between work, marriage and fertility for educated American women have found that work will vary with length of marriage, number and age of children, support of husband, husband's educational and income levels and wife's "taste for housework," child care ideology and work commitment (Bialby, 1978; Spitze and Spaeth, 1978; Perrucci and Targ, 1978). How the educated British woman pursues a full time career while raising a family has been the subject of numerous studies (Collins, 1964; Rapoport and Rapoport, 1971). Fogarty, Allen, Allen and Waters found, for example, that members of the administrative grade of the British Civil Service who stayed in their posts upon marriage and childbearing came from higher class backgrounds, had better educated mothers and more supportive husbands (1971:284-288).

Given the traditionally discriminating reaction of the economic sector to women in pursuit of advanced career goals, it would be expected that those women who achieve high educational attainments in an elitist educational system would be able to offset the potentially negative effects of gender status in the job market more easily than women coming from a less selective educational system.

Hypothesis 1C suggests that for women to gain the level of recognition in an open contest commensurate with that attained from selection to sponsorship requires a longer and more arduous effort. In short, American women may need

post graduate degrees to be comparable in their respective job markets to British women with undergraduate degrees.

Finally the experience gained from competing in the American system of higher education may prepare women more effectively to develop strategies for handling the dual career role and for confronting obstacles thrown up in the occupational sector.

Comparability of Samples

The data sets used in this project, while independently created and never before compared, have striking similarities. The American data are drawn from the National Opinion Research Center's five wave longitudinal survey of a national sample of 1961 spring term college graduates (Davis, 1964). The sampling involved a two-stage probability design in which 135 institutions were selected at the first stage and samples of prospective graduates of these institutions were drawn at the second stage. This study will be based on the 1968 follow-up of a thirty per cent sub-sample of earlier waves (81% responded to the fifth wave). For this analysis, only the 2969 women will be used as subjects.²

The British sample was drawn from the population of 1960 British university graduates which included half the male graduates and all the female graduates.³ A postal survey undertaken in 1966 by Keith Kelsall and his colleagues at Sheffield University generated an eighty-one percent response rate of the 1960 graduates, including 3212 women (Kelsall, Poole

²All the analyses presented here are based on a weighted sample. The weights, developed by NORC, were utilized to compensate for the overrepresentation of students from larger universities.

³Graduates of Bristol University and the faculties of Medicine, Dentistry and Veterinary Science were not included in the original study.

and Kuhn, 1970; Kelsall, Poole and Kuhn, 1972).

The four-year American degree makes the 1961 American graduates the same age cohort as the 1960 graduates of British three-year university programs. In addition, the 1967 follow-up of the British graduates and the final, 1968 follow-up of the American graduates provide the same seven year span of time since graduation.⁴

The Data

To test the hypotheses a limited set of variables were chosen. They include:

- X₁ father's occupation (a measure of social origin)
- X₂ status of undergraduate college (level of selectivity of undergraduate institution)
- X₃ number of children seven years after graduation (potential obstacle to graduate school and occupational attainment)
- X₄ number of years in graduate school completed seven years after graduation (additional years of educational attainment)
- X₅ occupational status attainment seven years after graduation (criterion variable)

Both father's occupation and the subject's occupation were assigned prestige scores on the basis of Treiman's (1978) Standard International Occupational Prestige Scale.⁵ The undergraduate college status score was a dichotomous variable. In Britain, those women who graduated from the prestigious institutions of Oxford and Cambridge were considered high status;

⁴Because of the focus on occupational status, women not working in 1967 (1968) were excluded from the analysis. In addition foreign students, women born prior to 1935 and non-white women (in the U.S.) were excluded from the actual analyses. The final n for the British was 1805, for the Americans it was 1434.

⁵The prestige scores for occupations are based on a collation of data from occupational prestige studies in 55 countries. For the U.S. and Great Britain the correlations between national prestige scales and the Standard Scale are above .96.

in the U.S. graduates of the institutions ranked by NORC as Class I in their School Quality Index (developed on the basis of the average National Merit Scholarship Test scores of the undergraduate student body) were designated high status. Number of children and number of years in graduate school were based on self-reports.

TABLE 1

<u>Description of Sample of Working Women Graduates</u> <u>in 1967 (Britain) 1968(U.S.)</u>	<u>British</u>	<u>American</u>
Working Women: % of total sample	56	48
n for this analysis	1805	1434
Mean occupational status of father*	59.56	48.39
Per cent attend high status college	12.1	12.1
Per cent attend graduate school	63.8	58.9
Mean years in graduate school	.88	1.08
Per cent married	55.0	65.3
Mean number of children	.30	.99
Per cent no children	80.5	42.6
Per cent one child	10.5	26.0
Per cent two children	7.6	23.0
Mean occupational status of subject*	64.07	57.33

*Based on Treiman's Standard International Occupational Prestige Scale.

Table 1 compares these characteristics for the two samples.

The occupational prestige scale scores of the British subjects' fathers, as compared to the American, are, on the average, more than eleven points higher on the Standard Scale. The British working woman graduates are clearly from higher social class origins than the Americans. Although the measures of attending a high status university were based on entirely different criteria

for the two countries, exactly the same proportion of American graduates had attended NORC Class I universities and colleges as had British women graduated from Oxford and Cambridge.

While a slightly larger proportion of British women attended graduate school at some time during the seven years following their graduation (a majority of women in each country), American graduate student women spent more time in graduate school.

Ten percent more of the American working women than the British were married seven years after graduation. Fertility was much higher for the Americans as well. A minority of the American working women (42.6%) were childless seven years after graduation as compared to the 80.5% of the British. Finally the mean occupational prestige of the British women graduate was seven points higher on the Standard Scale than the American.

Because the variables in the design have a temporal order, a causal model can be constructed. Father's occupation (X_1) occurs earliest in time (in its potential effects on daughter's occupational attainment) so it is placed at the beginning of the model. Status of undergraduate college (X_2) is seen as a function of the prior variable. The third variable (X_3), number of children, is primarily viewed as an obstruction variable to the pursuit of both graduate school education and occupational status. The fourth variable, years in graduate school (X_4) is determined directly by status of the undergraduate college and indirectly through the potentially negative mediating effects of bearing children. The last variable, occupational status attainment, is determined by the second, third, and fourth variables. The effects of the first variable are assumed to be subsumed through the intervening variables. Disturbance factors (R_x , R_y and R_z) complete the set of determinants.

Assuming the conditions necessary for path analysis as developed by

Duncan (1966) Heise (1969) and Land (1969),⁶ stepwise regressions were produced to determine the path coefficients for sets of logically ordered variables predictive of the third, fourth and fifth variables in the model. The zero-order correlations between variables not related by paths are considered as spurious—the result of unspecified intervening variables.

Results and Interpretation

The matrix in Table 2 presents the simple correlations between the five variables. The greater academic selectivity of the British educational system can be seen in the much lower correlation between father's occupation and status of undergraduate college ($r = -.02$) as compared to the U.S. ($r = +.23$). Yet attendance at Oxford or Cambridge is more highly correlated with final occupational status ($r = .11$) for the British women than is true in the U.S. ($r = .06$).

The association between attending graduate school and occupational status is higher in America than in Great Britain, but the intervening effects of childbearing have a more negative association with graduate school attainment in the U.S. ($r = -.17$) as well as with occupational status attainment ($r = -.15$).

Figure 1 allows a more careful analysis of the causal ordering of the variables. Of major interest is the much higher path coefficient γ_{54} for the United States than Great Britain. The greater fit between post-graduate educational achievements and occupational attainment seems to support the conception of the American system of education as a contest in which valuable educational status is won only after a long haul (Hypothesis 1C).

⁶The variables include disturbance factors, are in standardized form, and are linear and additive. The disturbance factors are uncorrelated and the causation flows in one direction.

TABLE 2

SIMPLE CORRELATIONS AMONG FIVE STATUS CHARACTERISTICS
IN GREAT BRITAIN (1967) AND THE UNITED STATES (1968)

Status characteristics:	STATUS CHARACTERISTICS				
	1	2	3	4	5
1 Father's occupation	...	-.02	.05	-.02	-.02
2 Status of undergraduate college: high	.23	...	.00	.06	.11
3 Number of children	.01	-.11	...	-.12	-.001
4 Number of completed years of graduate school	.17	.10	-.17	...	.19
5 Daughter's occupation	.05	.06	-.15	.33	...
Mean correlation:					
Great Britain	-.003	.06	.01	.03	.07
United States	.12	.07	-.11	.11	.07

Note—Figures on Great Britain are given above the diagonal (...); those for the United States appear below the diagonal. For sources, see text.

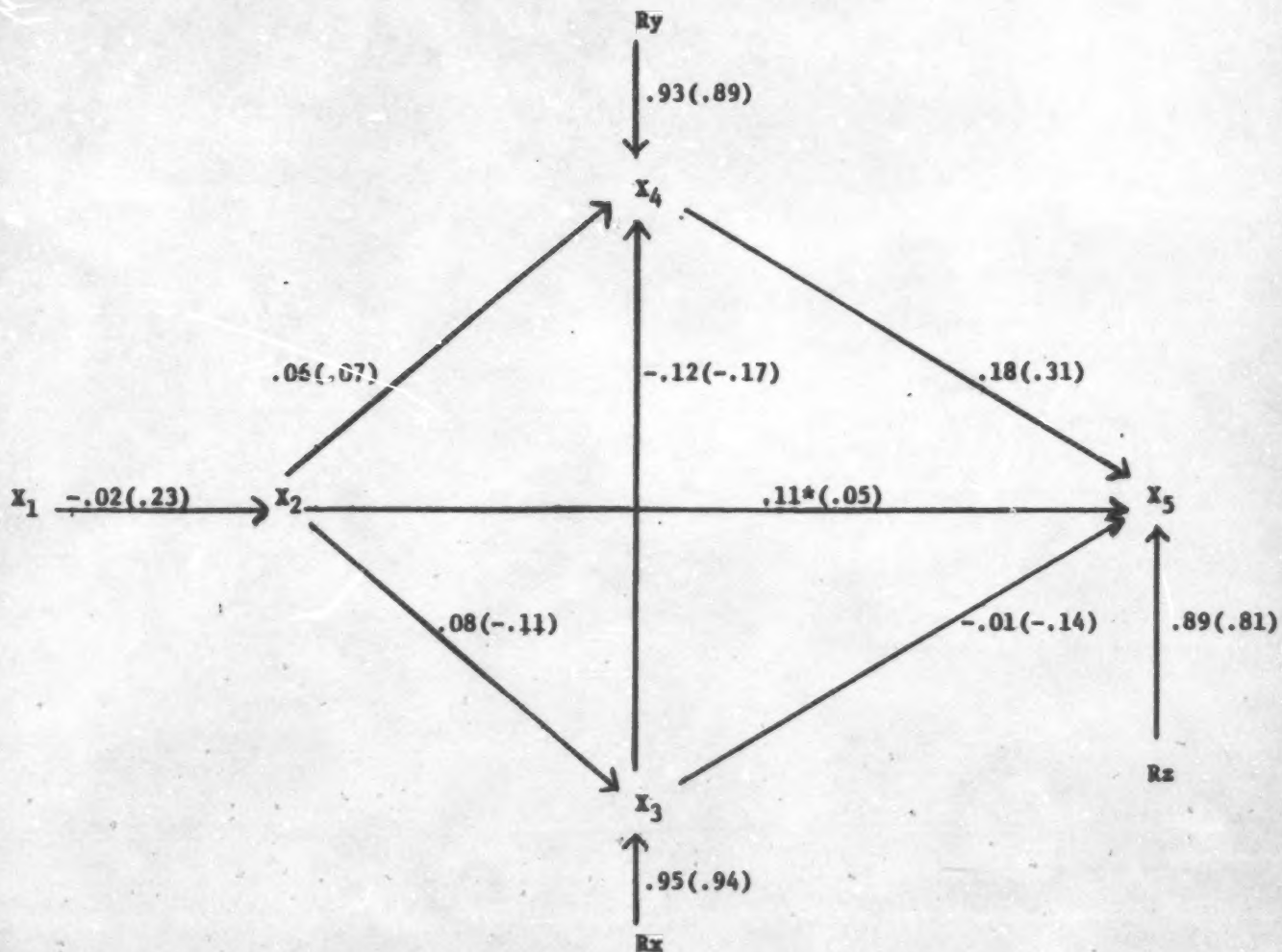


Figure 1.-Path analysis of women college graduates' occupational status attainment in Great Britain and the United States. X_1 = father's occupation; X_2 = status of undergraduate college, high; X_3 = number of children; X_4 = number of completed years of graduate school; X_5 = daughter's occupation in 1967(1968). United States path coefficients are given in parentheses after the British figures. For sources, see text.

Britain, on the other hand, would appear to offer almost as great a return in occupational status from attendance at a prestigious undergraduate college (P5.21=.11) as from the more extensive set of predictors that include fertility and graduate school attainment (P5.4321=.18). This would support Hypothesis 1A and 1B. For the Americans, in contrast, the total model (P5.4321) is six times the size of that coefficient based directly on status of undergraduate college and indirectly on social origins (P5.21).

The obstacle hypothesis (2A) is also supported by the model. If the "contest" system of American higher education socializes women to develop strategies to overcome obstacles to the pursuit of their occupational achievement goals, then one would expect that those who have children but continue to pursue graduate school may be anticipating (and thereby preparing for) the trials of the dual career of mother/worker. The fact that fertility has weaker effects on attending graduate school (and virtually no effect on job status) for British working women supports Hypothesis 1A that undergraduate educational status can be more quickly translated into occupational gain and less easily influenced by personal obstacles in Great Britain.⁷ While the path diagram indicates that number of children negatively affects both graduate school and occupational attainment, those American women graduates able to bear children and complete graduate school are more likely to succeed in their careers than comparable British women.

Summary and Conclusion

Taking advantage of two highly comparable surveys of British and American college graduates followed up seven years after graduation, an analysis of the

⁷It should be re-emphasized that over 80% of the British working women were childless as compared to only about 40% of the American women.

cross-national predictors of occupational status attainment of the women graduates was developed to test differences in the structural and socialization effects of the two educational systems. Use of the newly devised Standard International Occupational Prestige Scale allowed for a precise comparison of occupational prestige. Comparative path analyses indicated (1) that attendance at a prestigious undergraduate college was less dependent on social origins (yet more predictive of occupational status) in Great Britain than in the United States; (2) that graduate school attainment was more highly associated with occupational prestige in the U.S. than in Great Britain and (3) that mothering was much less likely to take American women, than British, out of graduate school or a career, though it reduced the length of time in graduate school and the prestige of early career attainments.

These findings suggest that Turner's conception of the British and American educational systems as respectively characterized by sponsorship or contest aptly describe the effects of higher education on women's career attainments. British graduate women selected at an earlier age, on academic criteria, are more readily able to convert their high status undergraduate education into occupational prestige. But this is largely true for those who remain childless in the seven years following graduation. American women graduates have a less valuable undergraduate degree which is more convertible to high occupational status if it first leads to graduate schools. American educated mothers are more prepared to pursue graduate school and a career than are comparable British women. Accustomed to achieving and gaining rewards for achievement on the basis of universalistic criteria, the highly-educated American wife-mother may have learned better strategies for balancing a competitive career (or graduate school) with particularistic obligations of family roles. This ability to overcome obstacles, characteristic of the educated American mother, may well be an unintended consequence of the less

supportive, more competitive, environment of the American educational system.

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